

REMARKS

Claims 18-38 are pending in the application, of which Claims 18, 26, and 31 are independent. Claims have been rejected under 35 U.S.C. 102(e) and under 35 U.S.C. 103(a). Applicants respectfully traverse the rejections and request reconsideration.

Claim Amendments

Independent Claims 18 and 26 are being amended to clarify that a source or intermediate element originates an Operations, Administrative, and Maintenance (OAM) call in a given direction around a virtual path ring, and that the source element monitors for that OAM call to arrive at the source element in the given direction around the ring. Support for the amendments can be found at least on page 20, line 8, through page 21, line 4, of the specification and in Fig. 3. Referring to Fig. 3, it is apparent that an OAM call originating at source element 304, for example, and traveling in a given direction around the ring arrives back at source element 304 while traveling in the given direction.

Dependent Claims 21 and 28 are being rewritten in independent form. Thus, upon entry of this Amendment, Claims 18, 21, 26, 28, and 31 will be independent.

Rejections Under 35 U.S.C. 102(e)

Claims 18, 19, 22-26, 29-32, and 35-38 have been rejected under 35 U.S.C. 102(e) as being anticipated by Gruber *et al.* (U.S. Patent No. 6,563,795 hereinafter "Gruber").

Gruber describes a method of tracing nodes along a route by sending a trace cell downstream of a monitoring node. A downstream node may then "loop back" a trace cell in the upstream direction identifying itself to the monitoring node. *See* Gruber, col. 4, lines 10-35 and line 64, and Abstract.

The Office cites the loop back functionality of Gruber as disclosing the claimed invention, but Gruber's loop back function does not disclose a "*virtual path in a ring configuration*," as recited in independent Claims 18, 26, and 31. As can be seen in Fig. 1 of Gruber, the path (ref. num. 10) is not in a ring configuration. Further, Gruber operates by sending a cell downstream along its path and receiving a loop back cell in the upstream direction

of the path (*i.e.*, cells are sent out and back along the same path segments). This differs from the functionality of the claimed invention, which originates a call *"in a given direction around the virtual path"* and monitors for that same call *"to arrive at the source element in the [same] given direction around the virtual path,"* as now recited by independent Claim 18, and as similarly recited by independent Claim 26. Even if Gruber's path were to be arranged in a ring configuration, the loop back functionality of Gruber requires that a trace cell is transmitted back in the opposite direction along Gruber's path. Therefore, Applicants respectfully submit that Gruber does not teach or make obvious independent Claims 18 and 26.

Independent Claim 31 also recites a *"virtual path in a ring configuration,"* as presented above for Claims 18 and 26. Additionally, Claim 31 recites *"arranging a virtual circuit to permit transmission of ... calls from a source network element to the source network element."* The method of Gruber does not function in this manner. As described above, Gruber functions by send a cell in a downstream direction. Another node on the path then transmits a trace cell in the upstream direction. Therefore, Applicants respectfully submit that Gruber does not *"permit transmission of ... calls from a source network element to the source network element,"* as recited by independent Claim 31.

Dependent Claims 19, 22-25, 29, 30, 32, and 35-38 depend from independent Claims 18, 26 or 31 and, thus, are novel and nonobvious over the cited art for at least the same reasons as Claims 18, 26 and 31. As such, Applicants respectfully request withdrawal of the rejections under 35 U.S.C. 102(e).

Rejections Under 35 U.S.C. 103(a)

Claims 21, 28, and 34 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Gruber in view of Huey *et al.* (U.S. Patent No. 5,467,349, hereinafter "Huey").

Claims 20, 27, and 33 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Gruber in view of Cappellari *et al.* (U.S. Patent No. 5,557,611, hereinafter "Cappellari").

Claims 21 and 28 are now in independent form, and recite that *"the virtual path is unidirectional."* Dependent Claim 34 also recites that *"the virtual path is unidirectional."* The Office acknowledges that Gruber does not teach that its path is unidirectional, but asserts that it would be obvious to combine a unidirectional path from Huey with the method of Gruber. This

proposed combination would not work, however, because the method of Gruber requires that a cell be transmitted in a downstream direction of Gruber's path and that a trace cell be transmitted back in the upstream direction of the path. Thus, the path of Gruber must be a bidirectional path. As such, it would not be obvious to combine a unidirectional path with the method of Gruber. Therefore, Applicants respectfully submit that Claims 21, 28, and 34 are novel and nonobvious over the cited references.


Dependent Claims 20, 27, and 33 depend from independent Claims 18, 26 or 31 and, thus, are novel and nonobvious over the cited art for at least the same reasons as Claims 18, 26 and 31. As such, Applicants respectfully request withdrawal of the rejections under 35 U.S.C. 103(a), and request acceptance of Claims 18-38.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims that will pending upon entry of this Amendment, namely Claims 18-38, are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By 
Patrick A. Quinlan
Registration No. 61,287
Telephone: (978) 341-0036
Facsimile: (978) 341-0136

Concord, MA 01742-9133

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